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10/758,184	01/16/2004	Masahiro Yamada	SON-2084/DIV	5530

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EXAMINER

SCHWARTZ, JORDAN MARC

ART UNIT	PAPER NUMBER
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2873

DATE MAILED: 07/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/758,184

**Applicant(s)**

YAMADA ET AL.

**Examiner**

Jordan M. Schwartz

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 February 2005.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 19-51,71-98 and 107-111 is/are pending in the application.  
4a) Of the above claim(s) 25-51,80-98 and 107-111 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 19-24 and 71-79 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 16 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 09/842,021.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 1/16/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION*****Election/Restriction***

Applicant's election of Group Ia, claims 19-24 and 71-79 in the Election received February 18, 2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No.09/842,021, filed on April 26, 2001.

***Specification***

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

***Claim Rejections - 35 USC § 112***

Claims 20, 23-24, 71, 76, and 79 (and dependent claims 21-22, 72-75, and 77-78) are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claim 20, stating "flattening the surface" lacks an antecedent basis. Furthermore, the disclosure discloses the second optical

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portion having two flattened surfaces, one in contact with the first optical portion and a second bottommost surface as well (such as Figure 3E, the uppermost and lowermost parallel surfaces of "1007") and it is not clear if applicant is referring to flattening the top surface or flattening the bottom surface rendering the claim vague and indefinite. If a specific surface is intended as a limitation then it needs to be claimed with greater clarity and particularity. For purposes of examination the assumed meaning is "flattening a surface".

With respect to claims 23-24 and 79, it is not clear if applicant is claiming that the optical device comprises all of the optical materials claimed, comprises one of the optical materials claimed, comprises at least one of the optical materials claimed, and the lack of clarity renders the claims vague and indefinite. With further reference to claim 79, applicant is claiming "the optical material is" and it is not clear if applicant means comprises, consists of, etc. For purposes of examination, in claim 23, the assumed meaning is "the first optical material comprises at least one of titanium oxide, tantalum oxide..." with similar meanings as appropriate to claims 24 and 79.

With respect to claim 71, that part of the claim stating "flattening the surface of the optical material" renders the claim vague and indefinite for the same reasons set forth above concerning claim 20. Furthermore, claiming "flattening the surface...to form the convex lens" further renders the claim vague and indefinite. From what is set forth in the specification and Figures, apparently it is not the flattening that is forming the convex lens but it is the filling in of the optical material into the concavity that is forming the convex lens. As a

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suggestion, in lines 8-11 it is suggested that applicant claim, "filling an optical material in the concavity of the molded first optical portion to form the convex lens; flattening a surface of the optical material filled in the concavity;" and this is the assumed meaning of lines 8-11 for purposes of examination.

With further reference to claim 71, line 13, claiming "is exposed in the first optical portion" renders the claim vague and indefinite because it is not clear what applicant means by being exposed in the portion. For purposes of examination the assumed meaning is "is exposed to the outside environment".

With respect to claim 76, the claim depends from claim 77 which is apparently not applicant's intended meaning (not dependent from a prior claim and "the window" would lack an antecedent basis). The intended dependency of claim 76 is not known rendering the claim vague and indefinite. For purposes of examination it is assumed that claim 76 meant to depend from claim 73 (since claim 73 is a prior claim and is claiming a window).

### ***Claim Objections***

Claims 19 and 78 are objected to because of the following informalities:

1. In claim 19, line 7, "the projects" should be corrected to "that projects"; and
2. In claim 78, line 3, "substantially arc" should be corrected to "substantially an arc".

Appropriate correction is required.

Claim 77 is objected to for the following reason. Since the intended meaning could be determined from the specification and the Figures, a 112

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rejection was not made but instead this lack of clarity issue is being raised in the following claim objection.

With respect to claim 77, claiming "the surface of the optical material is polished so that a flat surface..." creates a lack of clarity. Apparently, from what is disclosed in the specification and Figures, there is only one polished surface of the filled in optical material, however, "the surface" lacks an antecedent basis. It is suggested that it be changed to "a surface" for additional clarity.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Keller et al patent number 6,491,851.

Keller reads on these claims by disclosing the limitations therein including the following: a method of producing an optical device (abstract) comprising a first optical portion made of a first material having a concavity (Figures 2 and 6-7, column 7, lines 43-49 such as lenses 8 and 11 of Figures 6 and 7 having concavities formed by the mold); a second optical portion comprising a second

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optical material having a differing refractive index (column 5, lines 57-64, i.e. the material filled in the concavities as the second optical portion and being disclosed as having a differing refractive index); the second optical portion inserted into the concavity (column 5, lines 57-64); produced by injecting the first optical material into a metallic mold (Figures 2 and 6-7, column 6, lines 53-60, column 7, lines 43-49); formed with a projection that projects into a cavity to form the first optical portion having a concavity that reproduces the shape of the projection (Figures 2 and 6-7, column 6, lines 40-60, column 7, lines 43-49, the multiple projections of the mold forming the concavities within the lens); a step of filling the second optical portion in the concavity of the molded first optical portion (column 5, lines 57-64). A surface of the second optical portion filled in the concavity will inherently be flattened, this being reasonably based upon Keller et al disclosing the lens as an ophthalmic lens which would inherently have a smooth outer surface.

Claims 19-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Luebkehan patent number 3,912,400.

Luebkehan reads on these claims by disclosing the limitations therein including the following: a method of producing an optical device (abstract, column 1, lines 4-13) comprising a first optical portion made of a first material having a concavity (Figures 1-2, column 2, lines 7-23, lens "12" as the first optical portion); a second optical portion comprising a second optical material having a differing refractive index (abstract, column 2, lines 23-37); the second optical portion inserted into the concavity (column 2, lines 23-37); produced by injecting the first

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optical material into a metallic mold (column 2, lines 7-23); formed with a projection that projects into a cavity to form the first optical portion having a concavity that reproduces the shape of the projection (column 2, lines 19-23); a step of filling the second optical portion in the concavity of the molded first optical portion (column 2, lines 23-37). A surface of the second optical portion filled in the concavity will inherently be flattened, this being reasonably based upon Luebke man disclosing the material being rubbed into the opening which would inherently flatten the material.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keller et al in view of Sagara patent number 4,084,978.

Keller et al discloses as is set forth above but does not specifically disclose the material of the first or second optical portion as claimed. Sagara teaches that ophthalmic lenses can include at least one of these claimed materials for the purpose of providing an ophthalmic lens of improved optical performance (column 1, lines 5-27, column 4, lines 1-11). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the material of the first or second optical material as claimed

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in claims 23-24 since Sagara teaches that ophthalmic lenses can include at least one of these claimed materials for the purpose of providing an ophthalmic lens of improved optical performance.

***Allowable Subject Matter***

Claims 21-22 and 72-79 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Claim 71 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The following is a statement of reasons for the indication of allowable subject matter: with respect to the allowable subject matter, none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, with reference to claims 21-22, none of the prior art either alone or in combination, disclose or teach of the claimed method of producing an optical device specifically including, as the distinguishing features in combination with the other limitations, the projection having a substantially rotationally symmetric shape with respect to an optical axis, the claimed surface of the projection as substantially an arc, and in the flattening step, a surface of the second optical portion is polished so that a flat plane substantially vertical with respect to the symmetry axis of the concavity is formed. Specifically, with reference to independent claim 71, none of the prior art either alone or in combination, disclose or teach of the

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claimed method of producing an optical device specifically including, as the distinguishing feature in combination with the other limitations, the step of forming a hole so that part of the convex curved face closely contacting the concavity of the convex lens is exposed to the outside environment (the assumed meaning).

### ***Examiner's Comments***

Ishikawa et al patent number 5,922,250 is being cited to show a method of producing an optical device that would have read on at least claim 19, however, such a rejection would have been repetitive.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (571) 272-2337. The examiner can normally be reached on Monday to Friday (8:30 to 4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached at (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Jordan M. Schwartz  
Primary Examiner  
Art Unit 2873  
July 20, 2005